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PUBLIC SUMMARY REPORT

NUCLA-TELLURIDE TRANSMISSION LINE PROJECT

DRAFT ENVIRONMENTAL IMPACT STATEMENT

NATURITA CANYON ISSUES AND ALTERNATIVES

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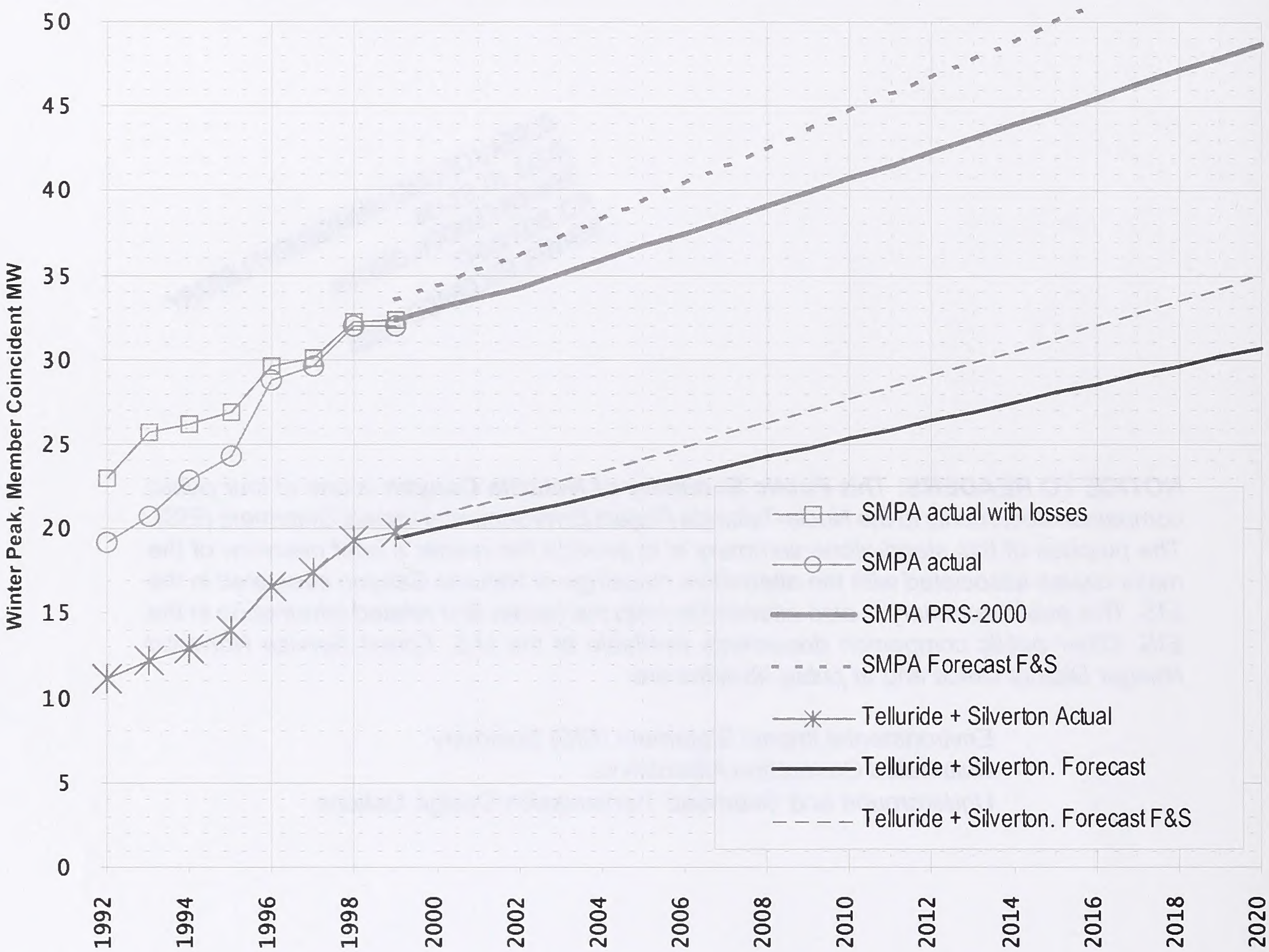
NOTICE TO READERS: *This* ***Public Summary of Naturita Canyon*** *is one of four public companion documents to the Nucla-Telluride Project Environmental Impact Statement (EIS). The purpose of this stand-alone summary is to provide the reader a brief overview of the major issues associated with the alternative crossings of Naturita Canyon evaluated in the EIS. This public summary is also intended to help the reader find related information in the EIS. Other public companion documents available at the U.S. Forest Service Norwood Ranger District Office and at public libraries are:*

Environmental Impact Statement (EIS) Summary
Distributed Generation Alternatives
Underground and Overhead Transmission Design Options

The Energy Situation

Southwestern Colorado, and in particular the Telluride Area, has been experiencing significant increases in power demand due to the growing population and related expansions of the ski area and tourism economy. Power to the Telluride Area is provided by San Miguel Power Association (SMPA), a cooperative member of Tri-State Generation and Transmission Association (Tri-State). Power demand in the Telluride Area reached 22 MW in 1999. SMPA estimates that by 2015, annual peak demands in Telluride and the surrounding area may reach approximately 30 megawatts (MW).



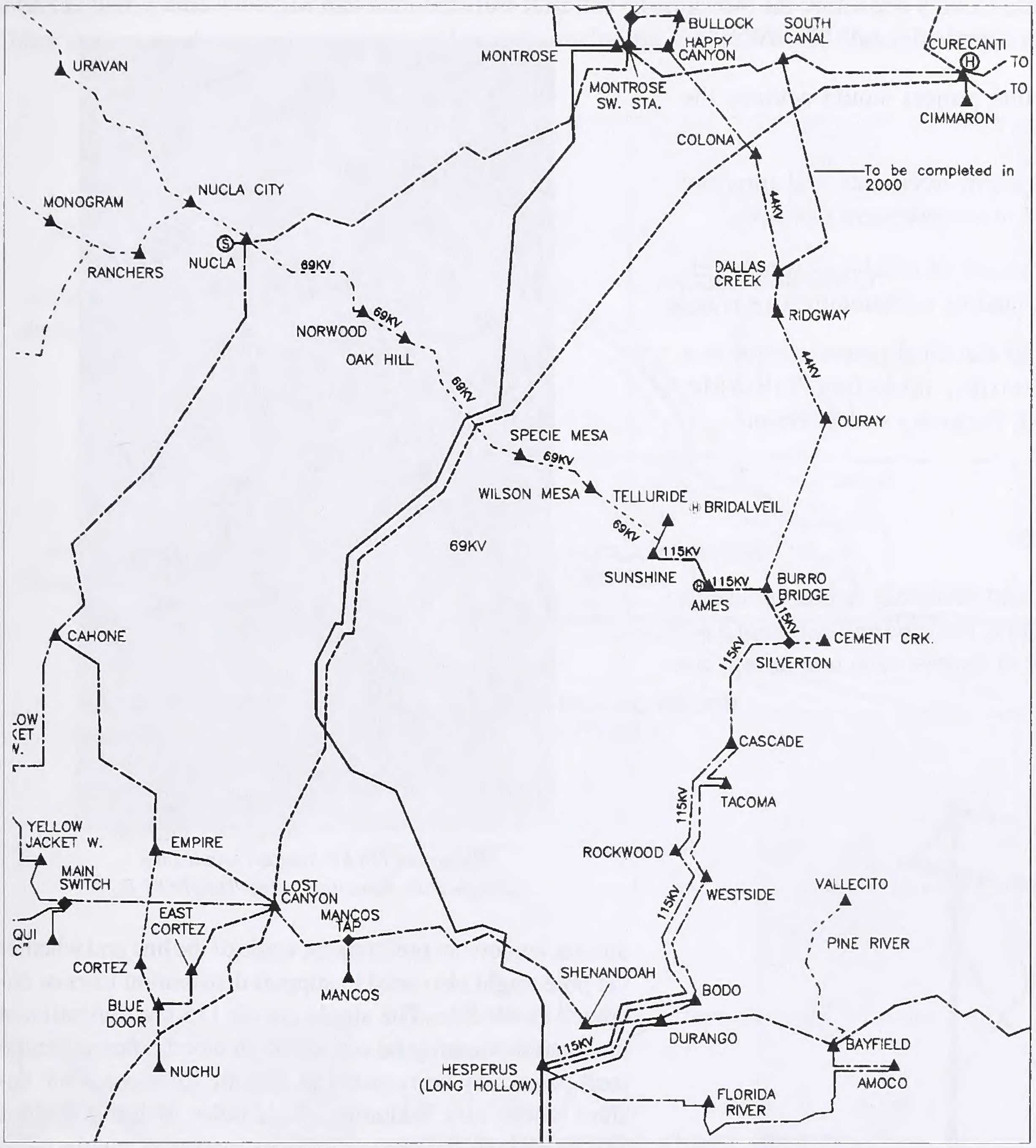
The Telluride Area includes Norwood, Oak Hill, Specie Mesa, Wilson Mesa, Sunshine, Telluride, and Cement Creek Substations.

The graph above shows the historical and projected demand for power during peak winter periods for SMPA's service territory and the Telluride area between 1992 and the year 2020. Between 1992 and 1998, the loads for the Telluride area have been approximately 68% of SMPA's total demand. The existing peak load within SMPA's service area typically occurs during the winter, and reached 32 MW in 1999. Projected demand for the entire SMPA service area is estimated by SMPA to reach 45 MW in the year 2015. (Tri-State 2001).

PRS – Power Requirement Study / F&S – PRS-2000 projection with Growth and Severe Weather

The Telluride Area receives its power supply from the Hesperus-Telluride 115 kV transmission line that is owned and operated by Tri-State. This line has a capacity of 32 MW and will be able to meet the Telluride Area's power demands into the foreseeable future. The Hesperus-Telluride line is subject to major hazards and power outage risks, however. Located across rugged mountainous terrain, including Ophir, Molas and Coal Bank Passes, the line is susceptible to heavy snowfalls, avalanches, and high winds. Until recently, the Nucla-Sunshine 69 kV line was able to provide adequate power to Telluride in the event of an outage on the Hesperus-Telluride line. The existing Nucla-Sunshine 69 kV line is more than 50 years old, however, and has been experiencing increasing power outages due to its age and design. With a capacity of only 13 MW, the Nucla-Sunshine 69 kV line is no longer able to adequately or reliably back up the loads in Telluride, particularly during the winter months when demand is highest.

The ramifications of not having a reliable source of backup power in the Telluride Area are significant and include risks to human health and safety as well as the local tourism economy. Should an outage on the Hesperus-Telluride line occur during the winter, an extended outage could affect Telluride, Mountain Village and surrounding communities such as Ophir, Placerville and residents of Wilson, Sunshine, and Specie Mesas. Temporarily, the existing Nucla-Sunshine line could be operated in a manner to provide up to 26 MW of power. This option, however, will soon be insufficient to cover the winter power loads. An extended outage would affect a number of community services including the town's wastewater treatment plant, and operations at the Telluride airport and ski area.



Regional Transmission Grid

In addition to the local power needs in SMPA's service area, southwestern Colorado is facing future congestion on the regional transmission grid. The capacity of the regional system, called TOT2A, is 690 MW. Of this capacity 420 MW is allocated to Western Area Power Administration to meet their obligations in New Mexico and Arizona. The remaining 270 MW of power is shared between Public Service Company of Colorado and Tri-State.

Power system planning for the region, including long-term power demand projections and system performance, is coordinated through the Western States Coordinating Council (WSCC). In the mid-1990s, Tri-State conducted power flow studies for WSCC that showed inadequate operating conditions in the future, including low voltages and system overloads. The studies found low voltages at the Cascade, Rockwood and Pagosa Springs Substations and overloading on the Nucla-Cahone 115 kV line. These conditions reflect the fact that the existing regional system will be unable to simultaneously meet both peak load demands and regional transfer requirements without violating industry performance standards. By replacing the existing 69 kV transmission line with a 115 kV system, a complete backup loop for power flow would be created between Hesperus and Nucla Substations.

FOR MORE INFORMATION ...

- EIS, Chapter 1.0, Section 1.3
- EIS, Appendix A-1

Tri-State's Proposed Project

In order to remedy the power reliability problems in the Telluride area and the region, Tri-State has proposed to replace the existing Nucla-Sunshine 69 kV line with a 115 kV transmission line. The 115 kV line would extend between the Nucla Substation in Montrose County and either the Sunshine or Telluride Substation in San Miguel County. The 115 kV line would have a capacity of approximately 55 MW.

The 115 kV transmission line project would achieve the following objectives:

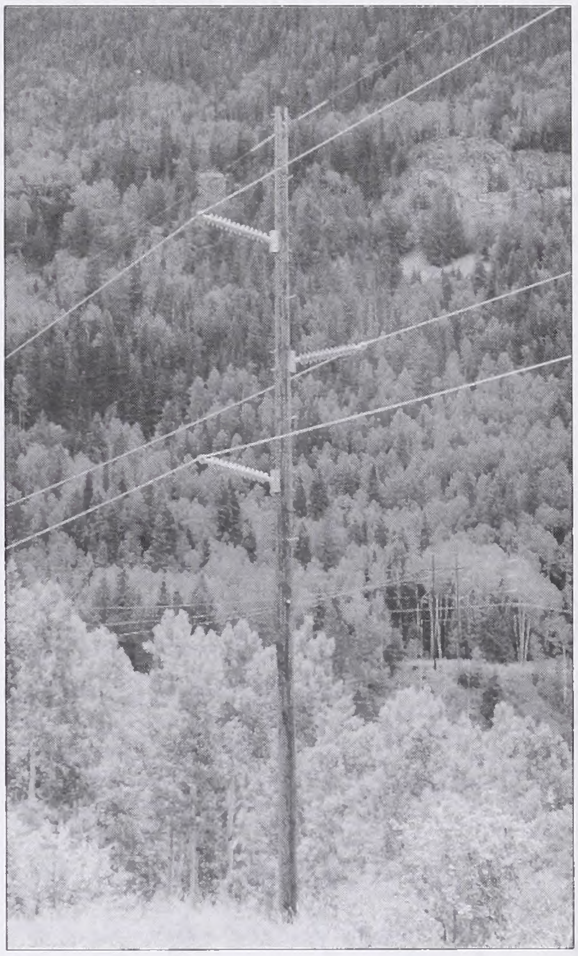
- Alleviate regional system overloads and improve load serving capacity in southwestern Colorado
- Provide a long-term source of reliable power to Telluride and other surrounding communities
- Improve the quality of electrical power service to a number of communities, including Telluride, Norwood, Rockwood, Purgatory and Silverton

Design Features

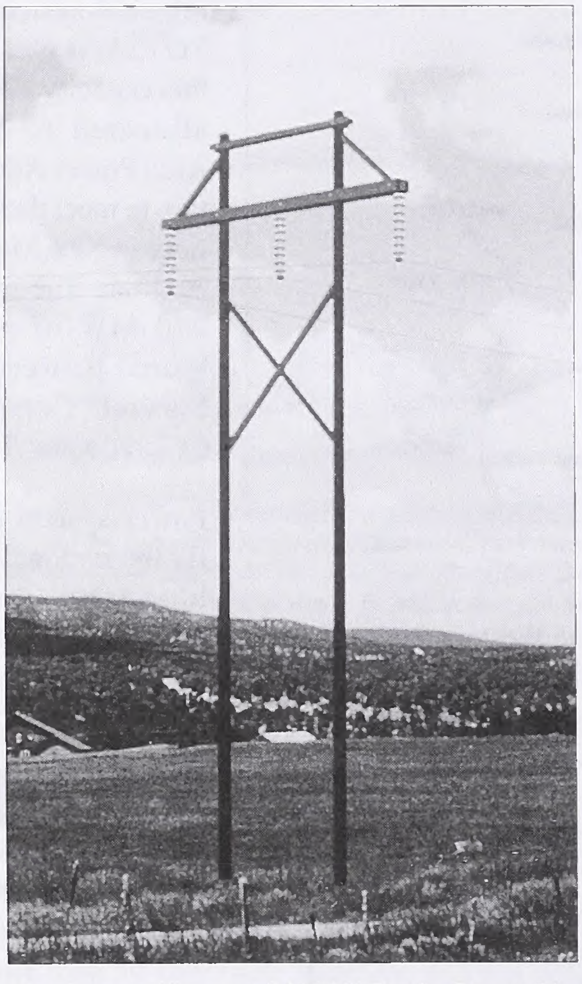
A variety of pole designs and materials would be used to support the 115 kV conductors. The type and height of a pole would depend on a number of factors including terrain conditions, landowner preferences, angle of the line and whether the pole might also need to support distribution lines or another 115 kV line. The single circuit 115 kV transmission line would primarily be supported on wood poles, although steel poles may be required in specific locations. Pole designs would vary, including single poles, H-frame designs and three-pole structures. In most instances, single poles would be used across private lands, while H-frame would be installed across open public lands. Ground wires would be installed on all poles to provide protection against lightning. The ground wires would also carry fiber optic communications cables.

Single poles would average 81 feet in height, varying between 65 and 97 feet above ground. Average spacing between poles would be 450 feet.

H-frame poles would range in height between 61 and 88 feet, with an average height being 80 feet. Spacing between H-frame structures typically would be 800 feet.



Proposed 115 kV Single-Circuit Line
(Single Pole Structure – Avg. Height 81 ft.)



Simulation of Proposed 115 kV Single-Circuit Line
(H-frame Structure – Avg. Height 80 ft.)

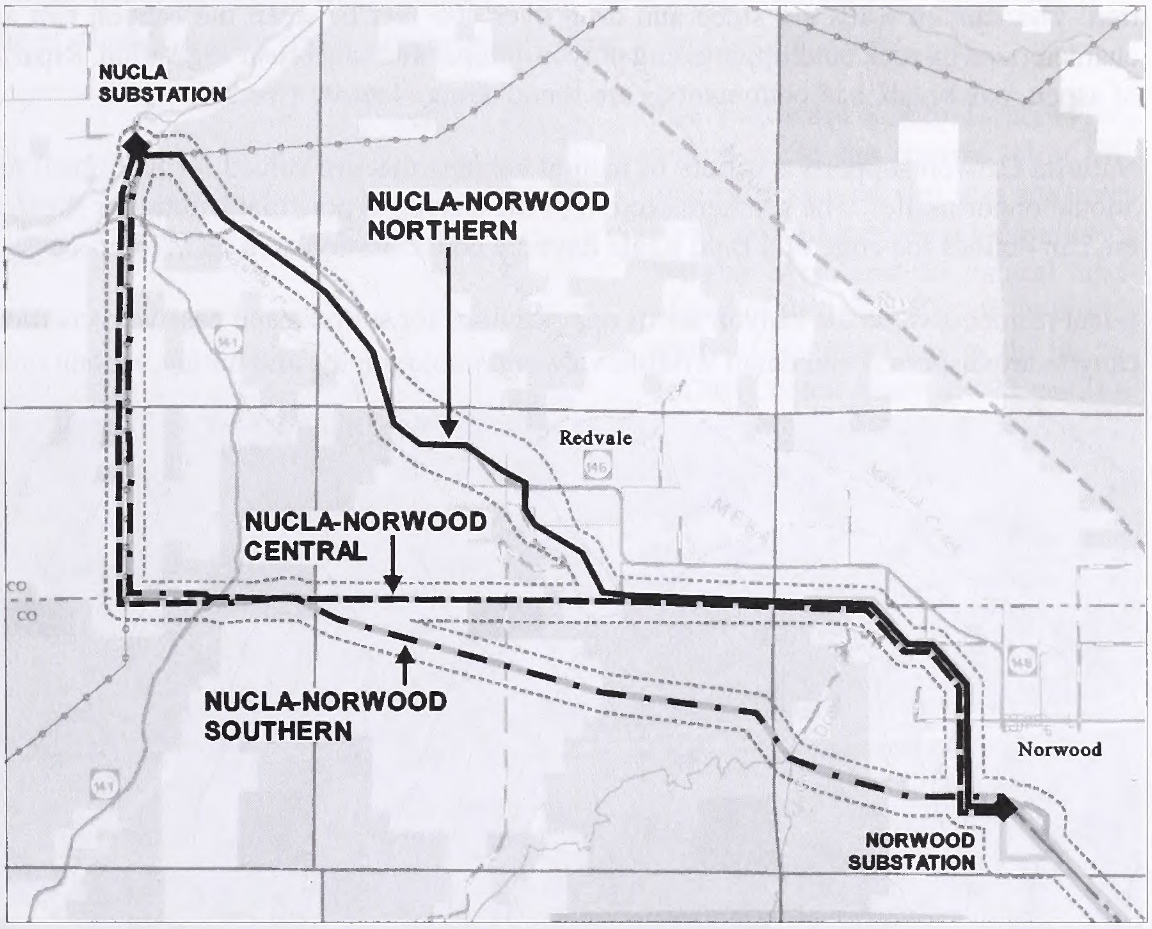
Alternative Corridor Locations

The EIS evaluates a number of routing alternatives for the proposed 115 kV transmission line, as well as minor routing variations and undergrounding options. Alternatives are organized in the EIS according to three routing options between the Nucla and Norwood Substations, and two alternatives between the Norwood and Sunshine/Telluride Substations. Other system modifications are discussed as well, including changes to SMPA's distribution system and substations.

The Nucla-Norwood Northern Alternative is 16.5 miles long, and would result in short-term disturbances of 110 acres.

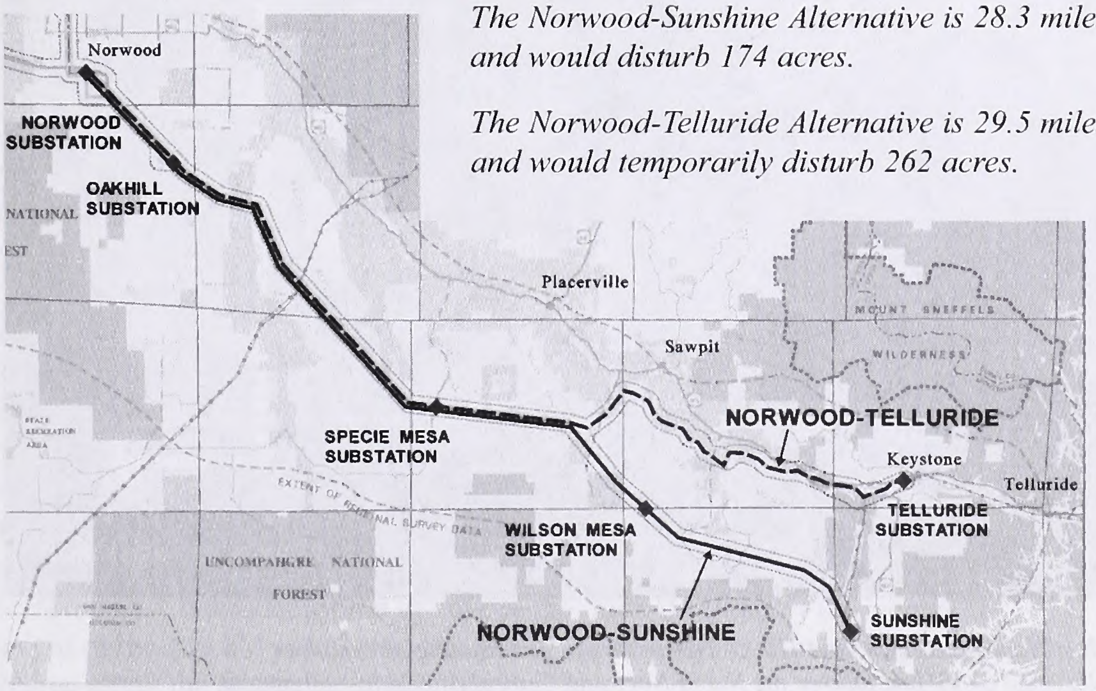
The Nucla-Norwood Central Alternative is 19.5 miles long, and would cause short-term disturbances of 183 acres.

The Nucla-Norwood Southern Alternative is 18.2 miles long, and would temporarily disturb 192 acres.



The Norwood-Sunshine Alternative is 28.3 miles long and would disturb 174 acres.

The Norwood-Telluride Alternative is 29.5 miles long and would temporarily disturb 262 acres.



FOR MORE INFORMATION ...

- EIS, Chapter 2.0, Section 2.1.1
- EIS, Appendix A-1

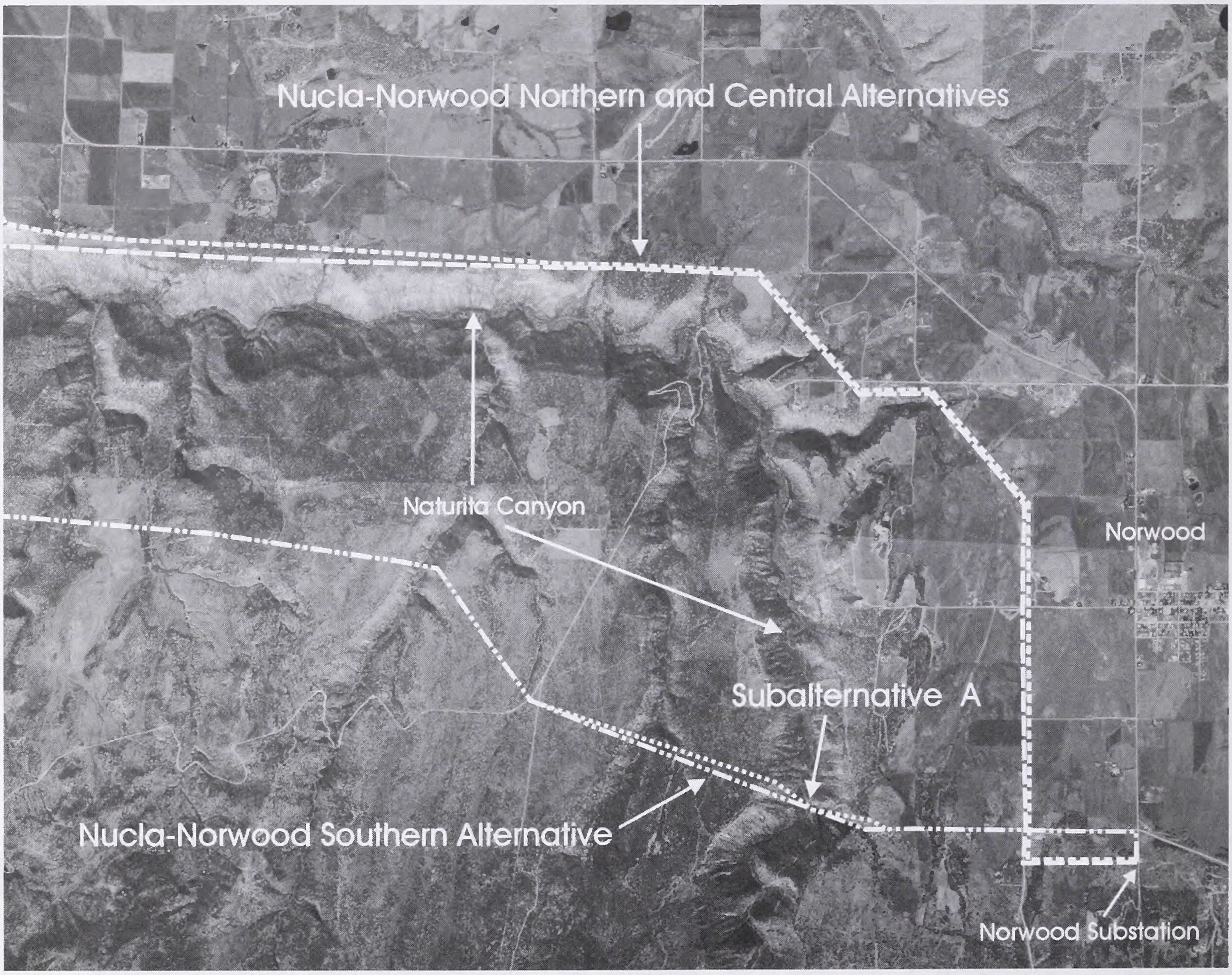
Introduction

Naturita Canyon would be crossed by the proposed 115 kV transmission line project between the Nucla and Norwood Substations. Concerns regarding potential impacts to the canyon and its natural and scenic values were raised by members of the Norwood community during scoping. This public document describes the various alternatives being considered across Naturita Canyon and the environmental trade-offs of the alternatives.

Naturita Canyon is an 'L-shaped' canyon that lies approximately 1.4 miles west of Norwood and the Norwood Substation. The canyon walls are steep and drop over 400 feet between the canyon rim and floor. The canyon slopes are characterized by rock outcroppings and pinyon-juniper and sagebrush vegetation. Riparian communities, including stands of aspen, oak brush, and cottonwoods are found along Naturita Creek.

Naturita Canyon supports a variety of natural habitats that are valued for biological resources as well as passive recreational opportunities. The southern section of the canyon is potential habitat for Mexican Spotted Owl, while the northern rim defines the edge of a Bald Eagle daytime concentration area on Wrights Mesa.

Local residents value the canyon for its opportunities for solitude and passive recreational pursuits. Activities within the canyon are dispersed and entail wildlife viewing, photography, and hiking, among others.


Nucla-Norwood Northern and Central Alternatives
Naturita Canyon
Norwood
Subalternative A
Nucla-Norwood Southern Alternative
Norwood Substation

Aerial Photograph of Naturita Canyon and 115 kV Transmission Line Routing Alternatives
Note: Existing Nucla-Norwood 69 kV line follows the Nucla-Norwood Central Alternative alignment.

EIS Alternatives Potentially Affecting Naturita Canyon

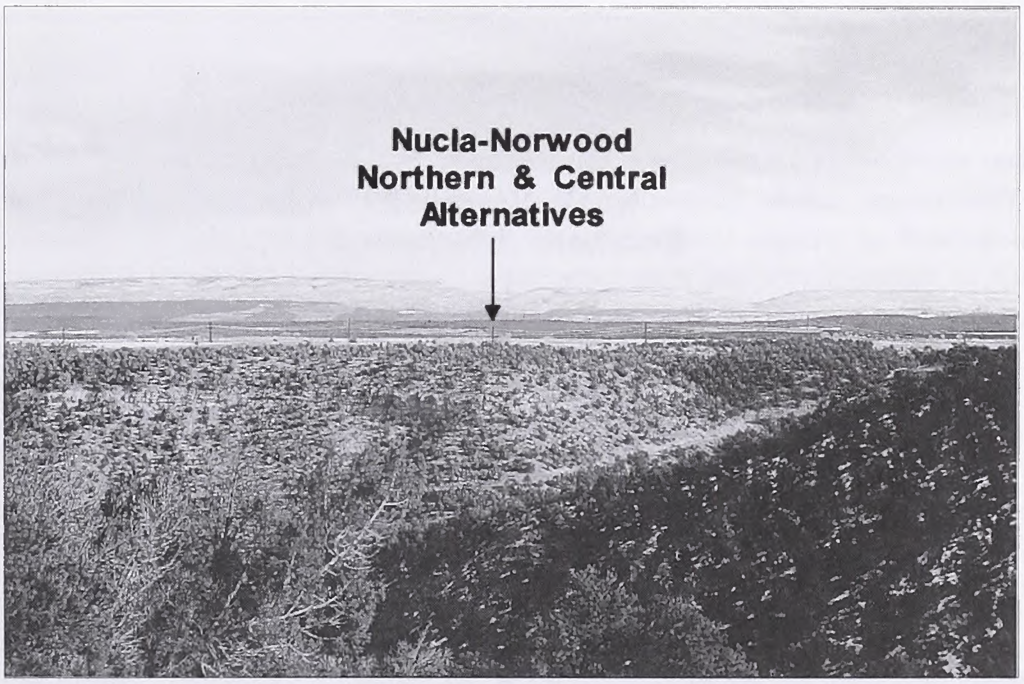
Nucla-Norwood Northern and Central Alternatives

The three primary routing alternatives between the Nucla and Norwood Substations cross Naturita Canyon. The Nucla-Norwood Northern and Central Alternatives both parallel the northern rim of the canyon for approximately 4 miles. An eastern finger of Naturita Canyon would be crossed, northwest of Norwood. Existing access roads and overland construction methods would be used for constructing the transmission project along the northern canyon rim. Helicopter construction would be employed at the northeastern edge of the canyon where there is no existing access.

Above: *Photograph of 69 kV Transmission Line from AA42 Road – McKee Draw*

The Northern and Central Alternatives would route the transmission line along the canyon rim that separates rural agricultural developments of Wrights Mesa and the natural landscapes of the canyon itself. In the vicinity of Naturita Canyon, the Northern and Central Alternatives would essentially be the same and consist of replacing the existing 69 kV line with a new 115 kV system. The existing easement may be relocated slightly in several areas to place the transmission line along this boundary between community land uses and the natural canyon environment. Existing land uses along the northern edge of the canyon consist mainly of agriculture, related outbuildings and uses, salvage yards, resource excavation sites, and dispersed rural residences.

Visual changes from replacing the 69 kV transmission line with the 115 kV transmission line would mainly be caused by the increased height of the 115 kV poles. On average, the 115 kV poles would be at least twice as tall as the 69 kV pole structures. Viewed against a backdrop of agricultural and industrial uses with structures of similar size, the 115 kV poles and lines would appear similar in scale to other visible developments. Consequently, the visual changes brought about by the increased height of the 115 kV poles would be perceived as only slight to moderate in degree along the north rim of Naturita Canyon.



Simulation of 115 kV Transmission Line

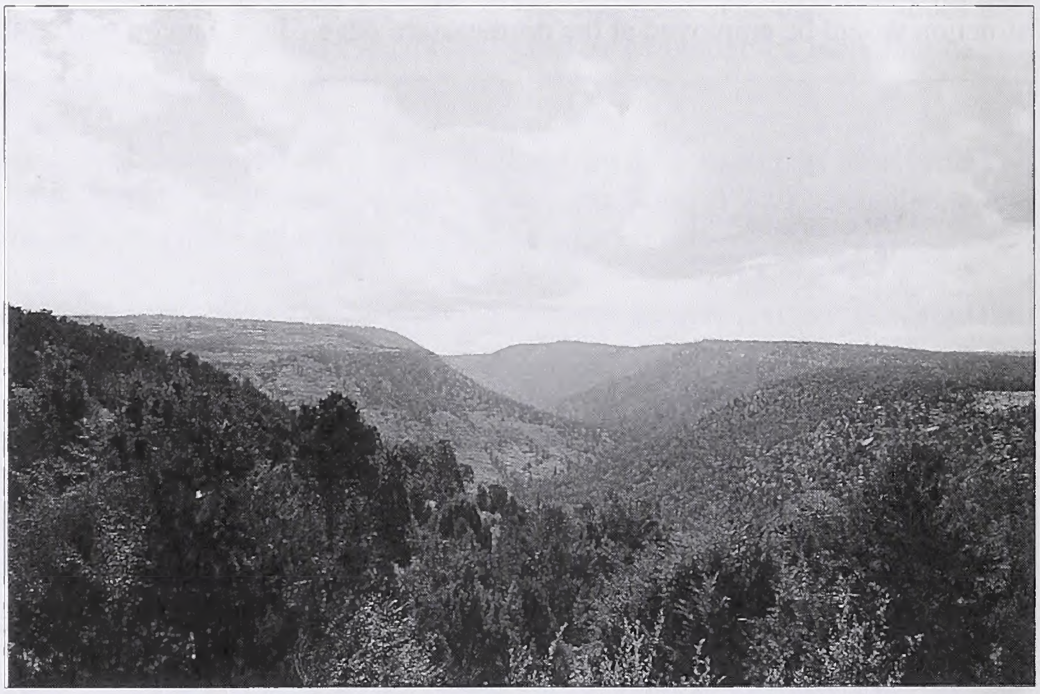
FOR MORE INFORMATION ...

- EIS, Chapter 2.0, Section 2.2.1
- EIS, Chapter 3.0, Sections 3.4.2.2, 3.5.2.2, 3.6.2.2, 3.8.2.2, 3.9.2.2 and 3.10.2.2
- EIS, Appendix A-1

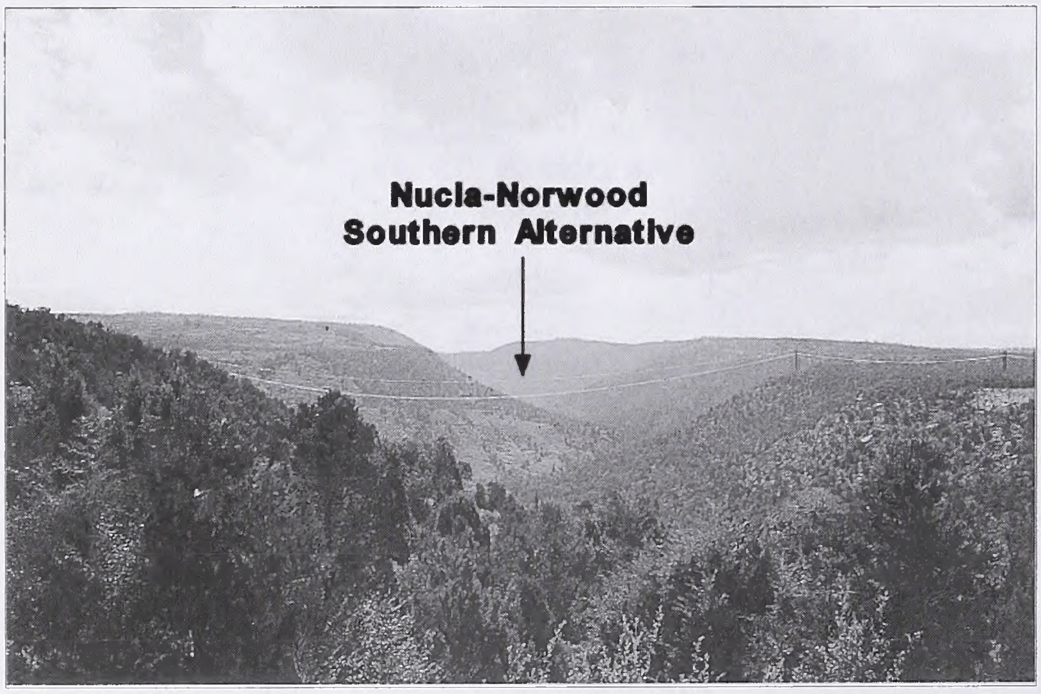
Nucla-Norwood Southern Alternative

The Nucla-Norwood Southern Alternative crosses a central section of Naturita Canyon, due west of the Norwood Substation. To the west of the canyon, this alternative primarily traverses public BLM lands that were cleared for seismic exploration in the early 1980s. Seismic exploration line clearings are typically 4 to 5 feet wide and crisscross the BLM lands west of Naturita canyon. Due to these existing linear disturbances, the BLM has indicated that they would consider allowing Tri-State to widen these areas to create access roads for the transmission line construction.

The use of seismic exploration lines for access would necessitate that the Nucla-Norwood Southern Alternative cross Naturita Canyon through a central section of the canyon that has not been previously disturbed or developed. The section of Naturita canyon that would be crossed by the Southern Alternative has no access roads, beyond a minor trail that follows the creek along the bottom. Consequently, this section of the canyon appears natural and wild and is valued locally for both its scenic and natural qualities. In recent years, homes have been increasingly built along the canyon rim to enjoy the scenic and solitude qualities of the canyon setting.



Photograph of View from Canyon Rim Residence



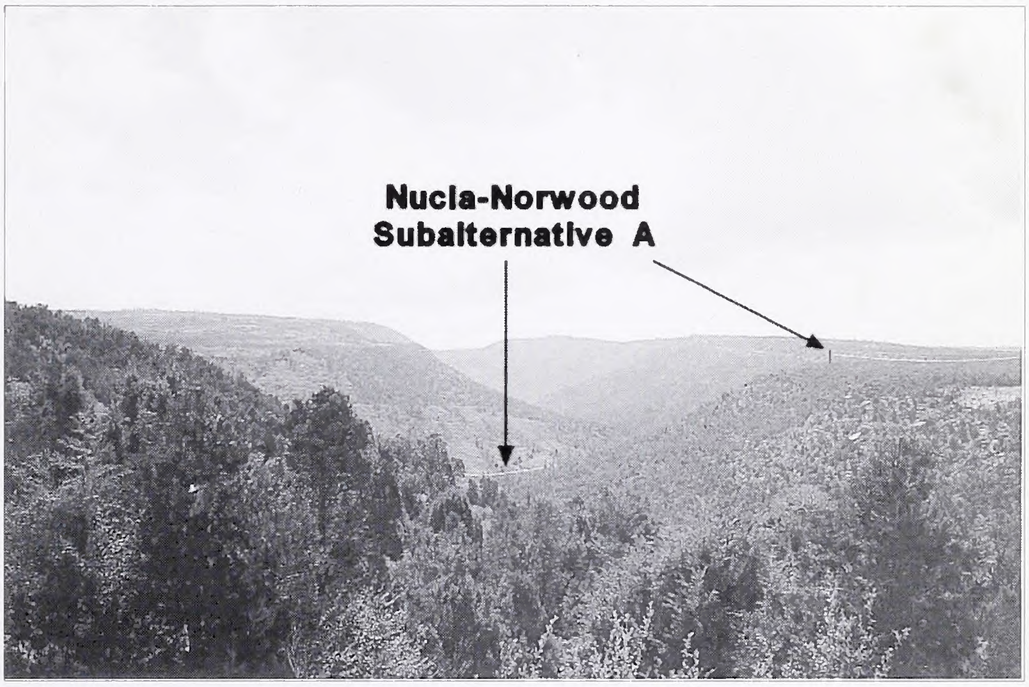
Simulation of 115 kV Transmission Line

Changes brought about by the Nucla-Norwood Southern Alternative would consist of visual contrasts caused by the poles, conductors, and colored marker balls that would be necessary due to FAA regulations. The pinyon-juniper vegetation cover along the canyon rim would provide little to no opportunities for screening the 80± foot tall poles or conductors as they cross the canyon. The lack of other utility corridors and developments of similar scale or character would also accentuate the degree to which the proposed transmission line would impose visual changes on the natural canyon setting. Depending on individual viewer settings, long views of the conductors and poles would be possible and could extend up to a mile or more. The visual contrasts of the conductors would be most evident during early morning and late afternoon low sun viewing conditions. In light of the public's expressed concern for preserving the canyon's natural qualities and the degree of visual change this alternative would cause, visual impacts of this alternative on Naturita Canyon are considered high.

Nucla-Norwood Subalternative A

The EIS also evaluates an alternative routing across Naturita Canyon for the Nucla-Norwood Southern Alternative. Subalternative A would entail routing the transmission line down into the canyon, rather than spanning the canyon rim to rim. By routing the transmission line into the canyon, the need for the FAA colored marker balls would most likely be avoided. In addition, the increased visibility of the conductors during low light morning and late afternoon conditions would be minimized.

Subalternative A would require that at least two transmission poles be installed near the canyon floor. Pole types would consist of two to three pole structures and require guying for stability. The visual changes caused by the 115 kV poles, conductors and insulators would be noticeable in the immediate area of the canyon where they are placed. Due to the presence of riparian vegetation and trees along Naturita Creek, the visual impacts of viewing the 115 kV facilities within the canyon would be of relatively short duration for persons passing through or recreating in the canyon. Residences along the canyon rim may still incur long-term adverse visual changes depending on individual setting and viewing conditions.



Simulation of 115 kV Transmission Line

Summary Conclusion

Among the four alternatives considered in the EIS for crossing Naturita Canyon, the Nucla-Norwood Northern and Central Alternatives would result in the least amount of impact to the natural and scenic qualities of the canyon itself. Although the Nucla-Norwood Southern Alternative would minimize land use and visual-related impacts to developed agricultural areas on Wrights Mesa, this alternative would have the greatest long-term visual and scenic impact to the canyon's natural qualities. Long-term unavoidable visual impacts to the qualities of the canyon would be caused by open long views to the poles, conductors and marker balls.

Subalternative A provides another option for crossing Naturita Canyon along the Southern Alternative. Subalternative A would effectively minimize visual impacts by routing the transmission line down into the canyon floor, rather than spanning the canyon rim to rim like the Southern Alternative. Advantages of this alternative include the avoidance of having to use colored marker balls across the canyon and the minimization of potential visual impacts from the conductors, particularly during early morning and late afternoon lighting conditions. Significant visual impacts to residential settings may still result, however.

Finally, between the Northern and Central Alternatives, the Central Alternative would most effectively minimize visual impacts to both Naturita Canyon and other viewers on Wrights Mesa. In addition to minimizing the impacts to Naturita Canyon along the northern canyon rim, this alternative would also avoid many of the visual impacts of the Northern Alternative across Wrights Mesa and the community of Redvale.

FOR MORE INFORMATION ...

- EIS, Chapter 2.0, Section 2.2.1
- EIS, Chapter 3.0, Sections 3.4.2.3, 3.5.2.3, 3.6.2.3, 3.8.2.3, 3.9.2.3, and 3.10.2.3
- EIS Appendix A-1